

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows. This listing of claims will replace all prior listings.

1. (CURRENTLY AMENDED)  
A semi-rigid mold member, comprising:  
a first ply, comprising an elastomeric sheet rubber and a release film;  
a second ply adjacent said first ply; and  
a sieve member adjacent said first ply and said second ply, said sieve member adjacent  
said elastomeric sheet rubber opposite said release film.
2. (ORIGINAL) The semi-rigid mold member as recited in claim 1, wherein said sieve member is embedded in said first ply.
3. (ORIGINAL) The semi-rigid mold member as recited in claim 1, wherein said first ply and said second ply include a fluoroelastomer material.
4. (ORIGINAL) The semi-rigid mold member as recited in claim 1, wherein said sieve member includes a stainless steel screen.
5. (ORIGINAL) The semi-rigid mold member as recited in claim 4, wherein said screen provides approximately 60 micron retention.
6. (CURRENTLY AMENDED) The semi-rigid mold member as recited in claim 1, ~~further comprising wherein said release film comprises~~ an FEP layer adjacent said first ply and opposite said second ply.
7. (ORIGINAL) The semi-rigid mold member as recited in claim 6, further comprising a third ply adjacent said second ply, and a fourth ply adjacent said third ply.

8. (ORIGINAL) The semi-rigid mold member as recited in claim 7, further comprising a rigid reinforcement insert between said third ply and said fourth ply.

9. (ORIGINAL) The semi-rigid mold member as recited in claim 8, wherein said reinforcement insert includes a metallic sheet.

10. (ORIGINAL) The semi-rigid mold member as recited in claim 7, wherein said third ply and said fourth ply include a fiber reinforced fluoroelastomer material.

11. (CURRENTLY AMENDED) A composite molding apparatus, comprising:

a rigid mold member; and

a semi-rigid mold member matable with said rigid mold member, said semi rigid mold member comprising a first ply located directly opposite said rigid mold member, said first ply comprising a sieve member, an elastomeric sheet rubber, and a release film, said release film and said sieve member located adjacent said elastomeric sheet rubber, said release film facing said rigid mold member.

including a sieve member sandwiched therein.

12. (CURRENTLY AMENDED) The composite molding apparatus as recited in claim 11, wherein said semi-rigid mold member comprises a ~~first ply and said~~ second ply, said sieve member adjacent said first ply and said second ply.

13. (CURRENTLY AMENDED) The composite molding apparatus as recited in claim 12, wherein ~~said first ply and~~ said second ply ~~include~~ comprises a fluoroelastomer material.

14. (ORIGINAL) The composite molding apparatus as recited in claim 12, further comprising a third ply adjacent said second ply, and a fourth ply adjacent said third ply.

15. (ORIGINAL) The composite molding apparatus as recited in claim 14, further comprising a rigid reinforcement insert between said third ply and said fourth ply.

16. (ORIGINAL) The composite molding apparatus as recited in claim 15, wherein said rigid reinforcement insert includes a metallic plate.

17. (ORIGINAL) The composite molding apparatus as recited in claim 14, wherein said third ply and said fourth ply include a fiber reinforced fluoroelastomer material.

18. (WITHDRAWN) A method of manufacturing a core composite article, comprising the steps of:

(1) mating a semi-rigid mold member to a rigid mold member to form a cavity containing a core having a plurality of protruding pins, the core located between a first composite prepreg and a second composite prepreg; and

(2) evacuating the cavity of said step (1) such that the pins perforate the composite prepreg plies while limiting pin penetration of the semi-rigid mold member to a predetermined depth.

19. (WITHDRAWN) A method as recited in claim 18, wherein said step (2) further comprises applying a pressure greater than 45 psi within the cavity.

20. (WITHDRAWN) A method as recited in claim 18, wherein said step (2) further comprises controlling said predetermined depth by locating a sieve member within the semi-rigid mold member at said predetermined depth.

21. (WITHDRAWN) A method as recited in claim 18, wherein said step (2) further comprises:

trapping the pins between a sieve member within the semi-rigid mold member and the rigid mold member; and

supporting the semi-rigid mold member relative to the rigid mold member upon the pins to minimize crushing of the core.

22. (RE-PRESENTED – ALLOWABLE CLAIM 2)

A semi-rigid mold member, comprising:

a first ply;

a second ply adjacent said first ply; and

a sieve member adjacent said first ply and said second ply, said sieve member embedded in said first ply.

23. (NEW) The composite molding apparatus as recited in claim 11, wherein said sieve member is embedded in said first ply.

24. (NEW) The semi-rigid mold member as recited in claim 1, wherein said elastomeric sheet rubber material comprises an unreinforced Fluoroelastomeric sheet rubber.

25. (NEW) The semi-rigid mold member as recited in claim 1, wherein said second ply comprises an unreinforced Fluoroelastomeric sheet rubber

26. (NEW) The composite molding apparatus as recited in claim 11, wherein said elastomeric sheet rubber material comprises an unreinforced Fluoroelastomeric sheet rubber.

27. (NEW) The semi-rigid mold member as recited in claim 1, wherein said first ply locates said sieve member a predetermined distance from said release film, said predetermined distance related to a plurality of protruding pins within a core located between a first composite prepreg and a second composite prepreg.

28. (NEW) The composite molding apparatus as recited in claim 11, wherein said first ply locates said sieve member a predetermined distance from said release film, said predetermined distance related to a plurality of protruding pins within a core located between a first composite prepreg and a second composite prepreg formed within a cavity defined by said rigid mold member and said semi-rigid mold member.

29. (NEW) The composite molding apparatus as recited in claim 11, wherein said sieve member provides approximately 60 micron retention.